

**You are invited to an IEEE Meeting on
Tuesday October 21, 2014**



Title: A Short Tutorial on Machine Learning Concepts

Speaker: Shashi Sathyanarayana Ph.D, Numeric Insight, Inc
Date: Tuesday October 21, 2014
Time: Presentation from 11:45 AM – 1:00 PM
Cost: No charge and SPS will provide snacks!
Place: Lawrence Livermore National Laboratory – LVOC / HPCIC T6475 – Credit Union Drive off Greenville Rd
RSVP: Not required but contact us for any questions: Ron Kane kane@ieee.org

Abstract

Big Data and analytics are at the center of a powerful movement. Businesses are using machine learning to parse, reduce, simplify and categorize data. However, it is daunting for the newcomer to get on board and become a part of the movement. Most reference texts on machine learning are aimed at researchers or those who can invest a significant amount of study time, which is difficult to do in today's busy world.

In this tutorial, participants will easily absorb the ABCs of machine learning concepts, terms and methodology while enjoying an intuitive introduction to the mathematics. They will understand how computers can be taught to detect patterns and make predictions. We will start with simple examples and cover concepts such as Bayesian classifiers, clustering, support vector machines, decision trees, neural networks and more. What makes this tutorial widely accessible is that machine learning concepts are vividly illustrated using live algorithms.

The tutorial will introduce machine learning concepts starting with a question such as "How does a bank implement a marketing strategy using their vast stores of data?" Classifiers will be introduced using simple and intuitive methods. Those with little or no prior exposure to machine learning or statistical pattern recognition have often heard the hand-waving phrase "... take all this data and analyze it to arrive at ..." The mystery around the word "analyze" will be effectively cleared.

Biography

Shashi Sathyanarayana Ph.D is the founder of Numeric Insight, Inc. Shashi is known for his engaging style of communicating complex ideas. He helps the audience make connections between what they already know and what they have set out to learn. He recognizes that learners look for practical applications of study they invest in. Shashi shares his insights in numerical matters by teaching topics such as machine learning, statistics, signal and image processing to a wide variety of audiences. See numericinsight.com for more information.

Meeting attendance is limited to US Citizens and Foreign National Citizens with valid identification. We ask that foreign visitors contact us at least three days before the meeting to give us time to ensure our compliance with site access.